

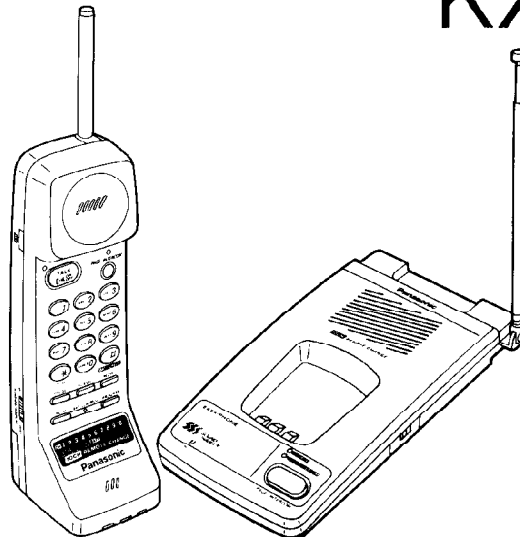
Service Manual

EASA-PHONE®
CORDLESSPHONE

and Technical Guide

Telephone Equipment

KX-T3855



(KX-T3855R)

(KX-T3855H)

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Panasonic

■ SPECIFICATIONS

General

Modulation:	FM, 5 kHz Deviation
Frequency Stability:	± 2.5 kHz
Dial Type:	Tone (DTMF)/Pulse
Redial:	Last dialed number each time the Redial button is pressed
Pause:	3.5 seconds per pause

	Base unit (KX-T3855H)	Portable handset (KX-T3855R)
Power Source:	AC adaptor KX-A10 (DC 12 V)	Built-in rechargeable Ni-Cd battery (KX-A36A)
(Receiver Section)		
Receiving frequency:	10 channel within 49.6 to 49.9 MHz	10 channel within 46.6 to 46.9 MHz
Adjacent Channel Rejection:	40 dB	40 dB
Sensitivity:	1 μ V for 20 dB S/N	2 μ V for 20 dB S/N
(Transmitter Section)		
Transmitting Frequency:	10 channel within 46.6 to 46.9 MHz	10 channel within 49.6 to 49.9 MHz
Jacks:	DC IN, Telephone Line	
Antenna:	Telescopic	Retractable Rubber Flexible
Speaker:	2" (5 cm) PM Dynamic	1 $\frac{3}{16}$ " (3 cm) ceramic type
Microphone:	Condenser Microphone	Condenser Microphone
Dimensions (H×W×D):	1 $\frac{5}{8}$ "×4 $\frac{1}{16}$ "×8 $\frac{3}{4}$ " (41×122×222 mm)	11 $\frac{7}{32}$ "×2 $\frac{1}{32}$ "×2 $\frac{1}{8}$ " (285×60×73 mm)
Weight:	0.72 lbs. (330 g)	0.62 lbs. (280 g)

Design and specifications are subject to change without notice.

DISASSEMBLY INSTRUCTIONS

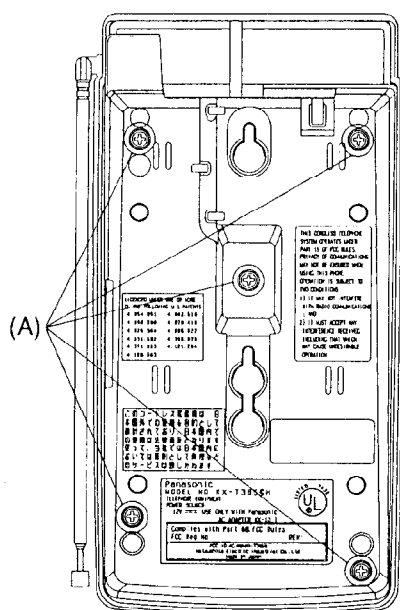
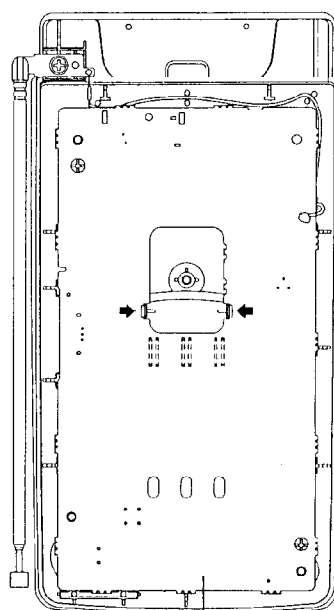


Fig. 3



Remove the P.C. Board.

Fig. 4

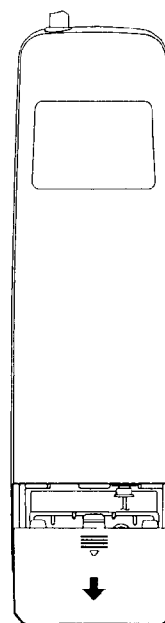


Fig. 5

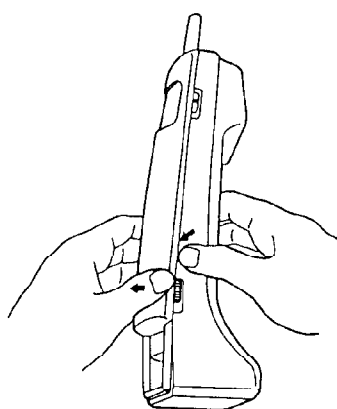


Fig. 6

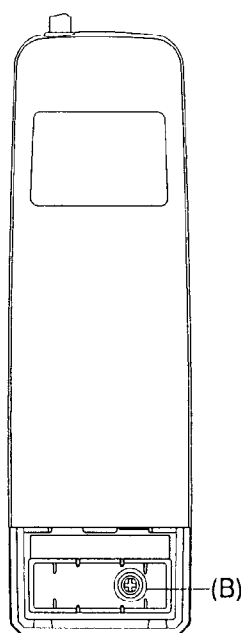


Fig. 7

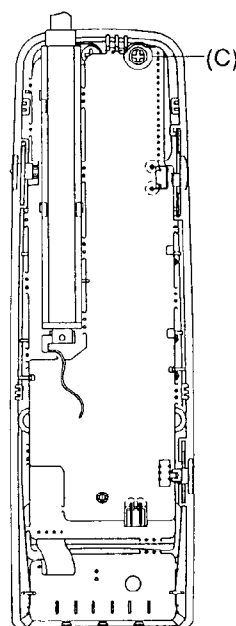


Fig. 8

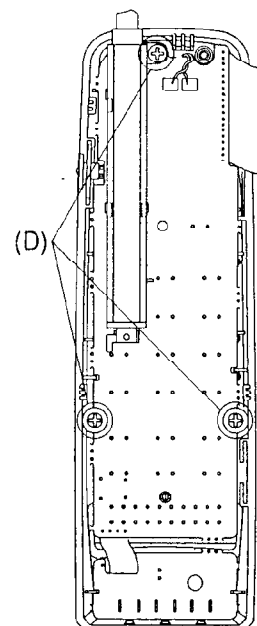


Fig. 9

Ref. No.	Procedure	Shown in Fig.—	To remove—	Remove—
1	1	3	Lower Cabinet	Screws (3x16) (A)x5
2	1, 2	4	Printed Circuit Board	Remove the P.C. Board.
3	3, 4	5	Rear Cabinet (Refer to the below note.)	Pull the battery cover in the direction arrow.
4		7		Screw (2.6x10) (B)x1
5	3-5	8	Printed Circuit Board	Screw (2.6x10) (C)x1
6	3-6	9		Screws (2.6x10, 2.6x8) (D)x3

Note: When removing the rear cabinet, remove and while pressing the arrow point. (See Fig. 6.)

CPU DATA KX-T3855H (Base unit)

IC4 MN158413AKPT

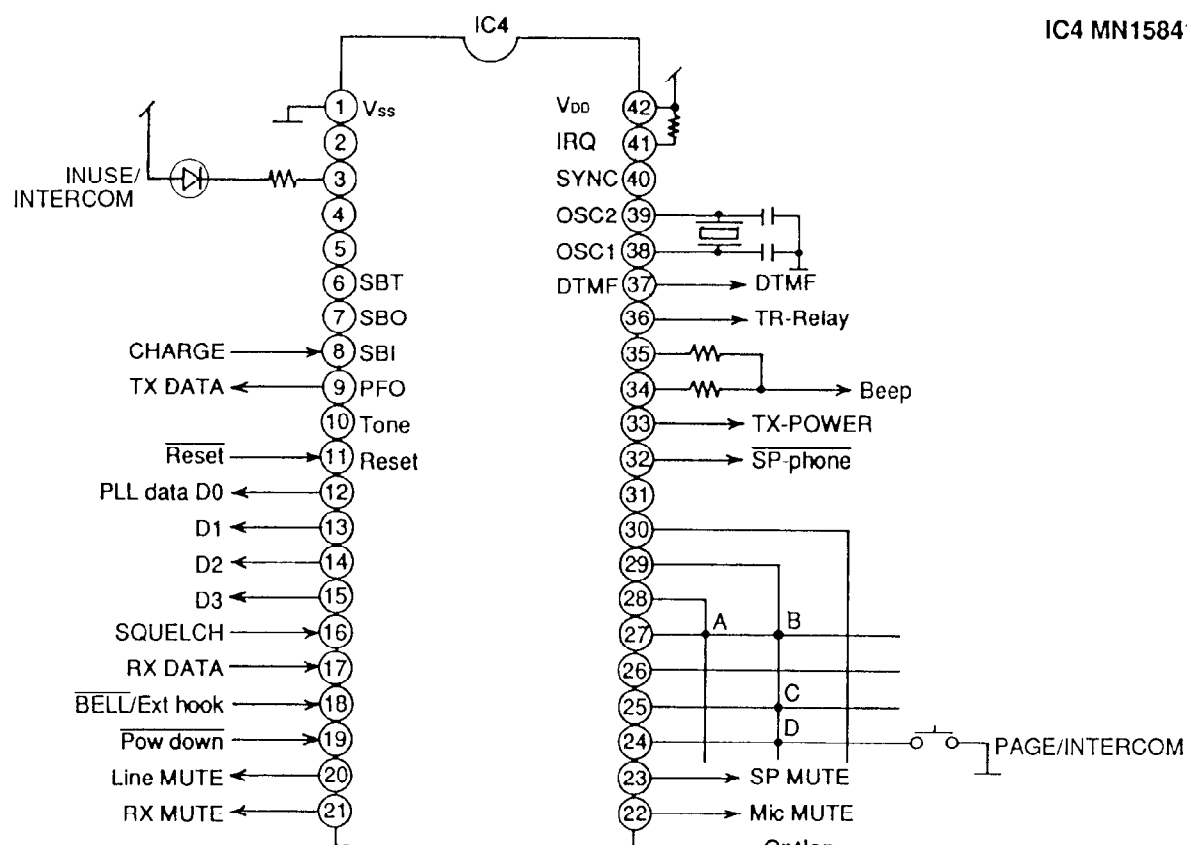


Fig. 11

Pin No.	Mark	Description	High	Low	Pin No.	Mark	Description	High	Low
1	V _{ss}	GND		GND	22	MIC MUTE	Not Used		
2		Not Used			23	SP MUTE	Not Used		
3	INUSE LED	INUSE/INTERCOM LED	OFF	ON	24		Key in	Normal	Key in
4		Not Used			25		Not Used		
5	CH LED	Not Used			26		Not Used		
6		Not Used			27		Not Used		
7		Not Used			28		Not Used		
8	CHARGE	CHARGE INPUT	CHARGE	Non	29		STROBE		
9	TX DATA	TX DATA	1	0	30		Not Used		
10	Tone				31		Not Used		
11	Reset	Reset	Normal	Reset	32	SP PHONE	Not Used		
12	D0	PLL DATA	1	0	33	TX POWER	TX POWER	OFF	ON
13	D1	PLL DATA	1	0	34		Not Used		
14	D2	PLL DATA	1	0	35	ZNR	Not Used		
15	D3	PLL DATA	1	0	36	T-R RLY	RLY	ON	OFF
16	SQL	SQUELCH INPUT	1	0	37	DTMF	DTMF		
17	RX DATA	RX DATA	1	0	38	OSC1			
18	BELL/HOOK	BELL/HOOK INPUT	HOOK	BELL	39	OSC2			
19	POWER DOWN	Power down DETECT	Normal	Power down	40		Not Used		
20	LINE MUTE	Line MUTE	MUTE		41	IRQ			
21	RX MUTE	RX MUTE			42	V _{DD}	V _{DD}	Normal	

CPU DATA KX-T3855R (Portable Handset)

IC101 MN150402KEA

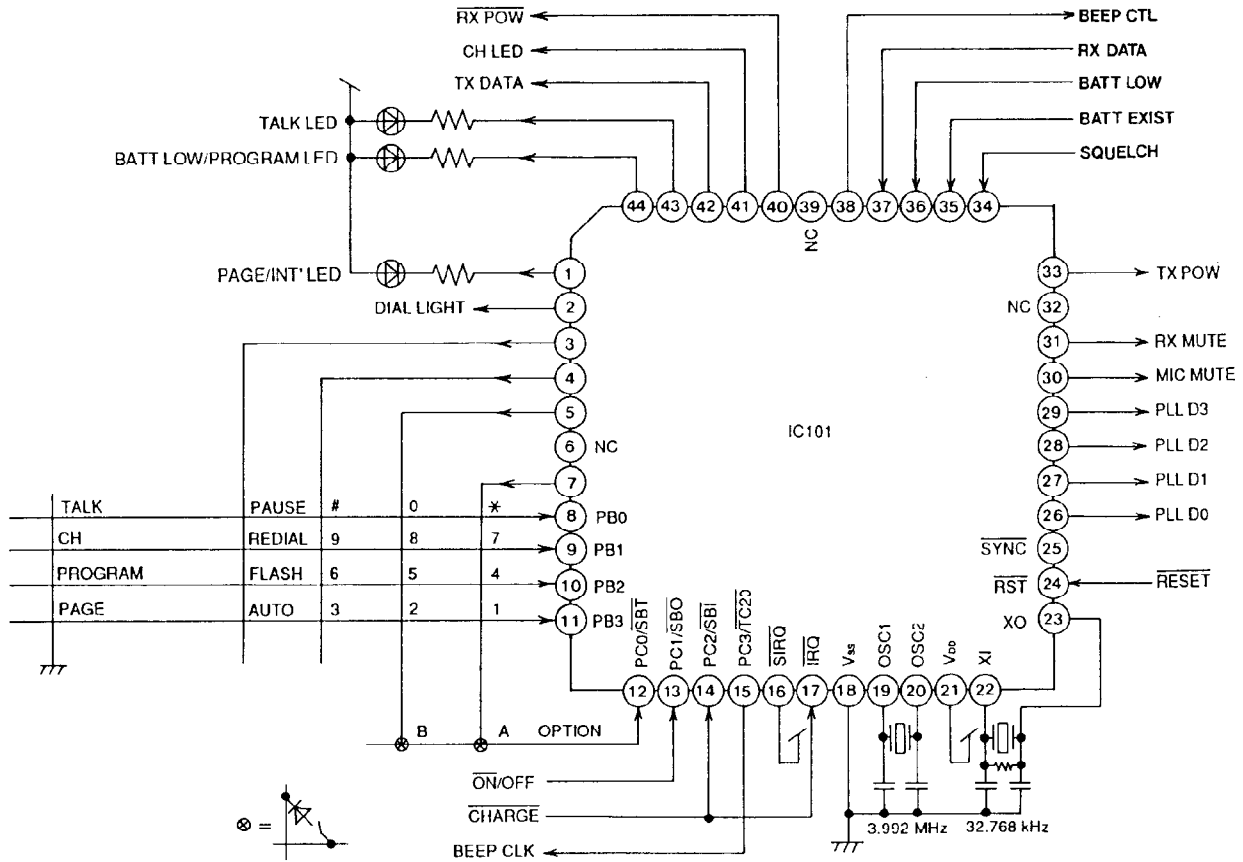


Fig. 12

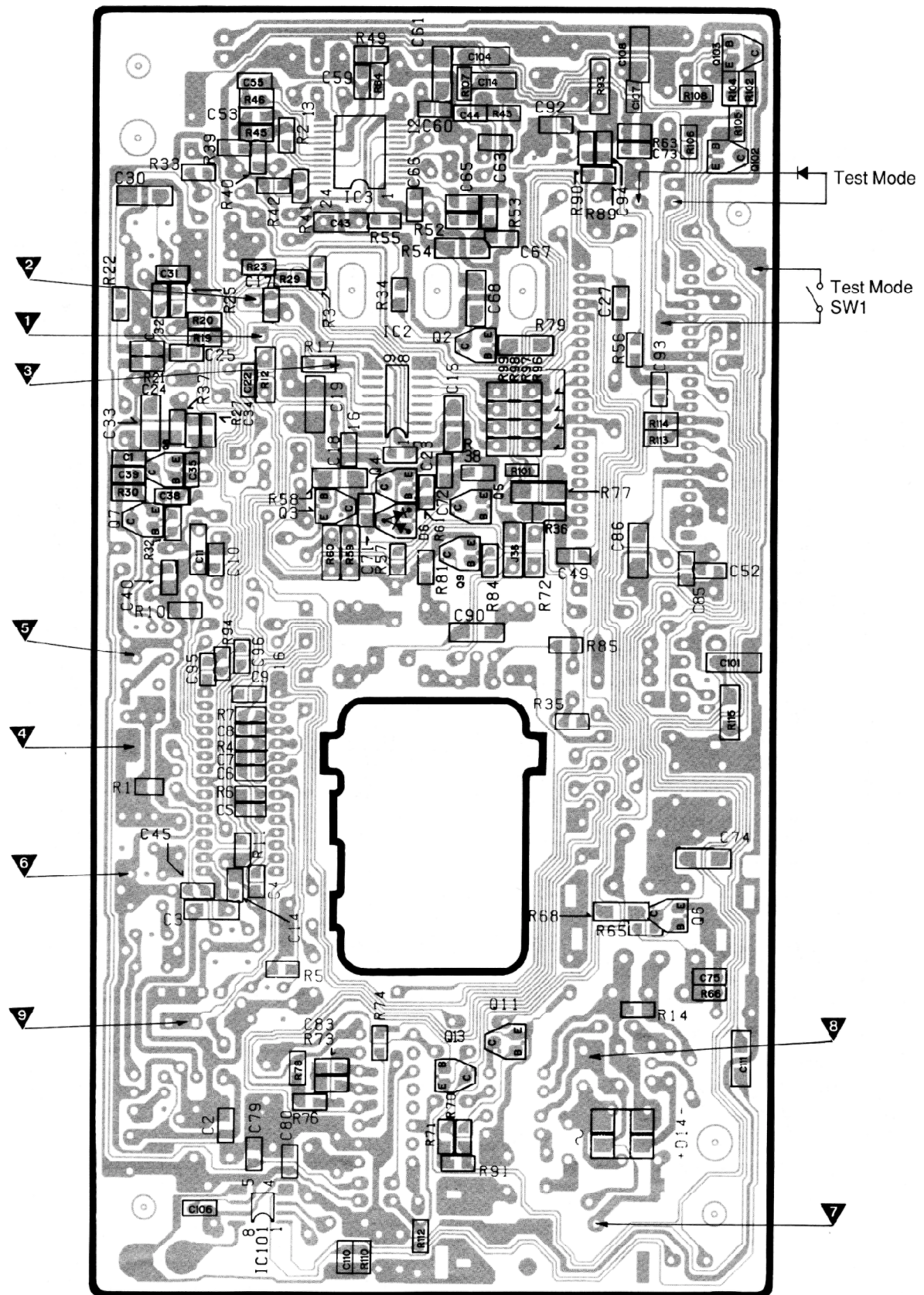
Option:

		Diode Open	Diode Closed
A	TEST CH	Normal	CH10
B	TEST CH	Normal	CH5

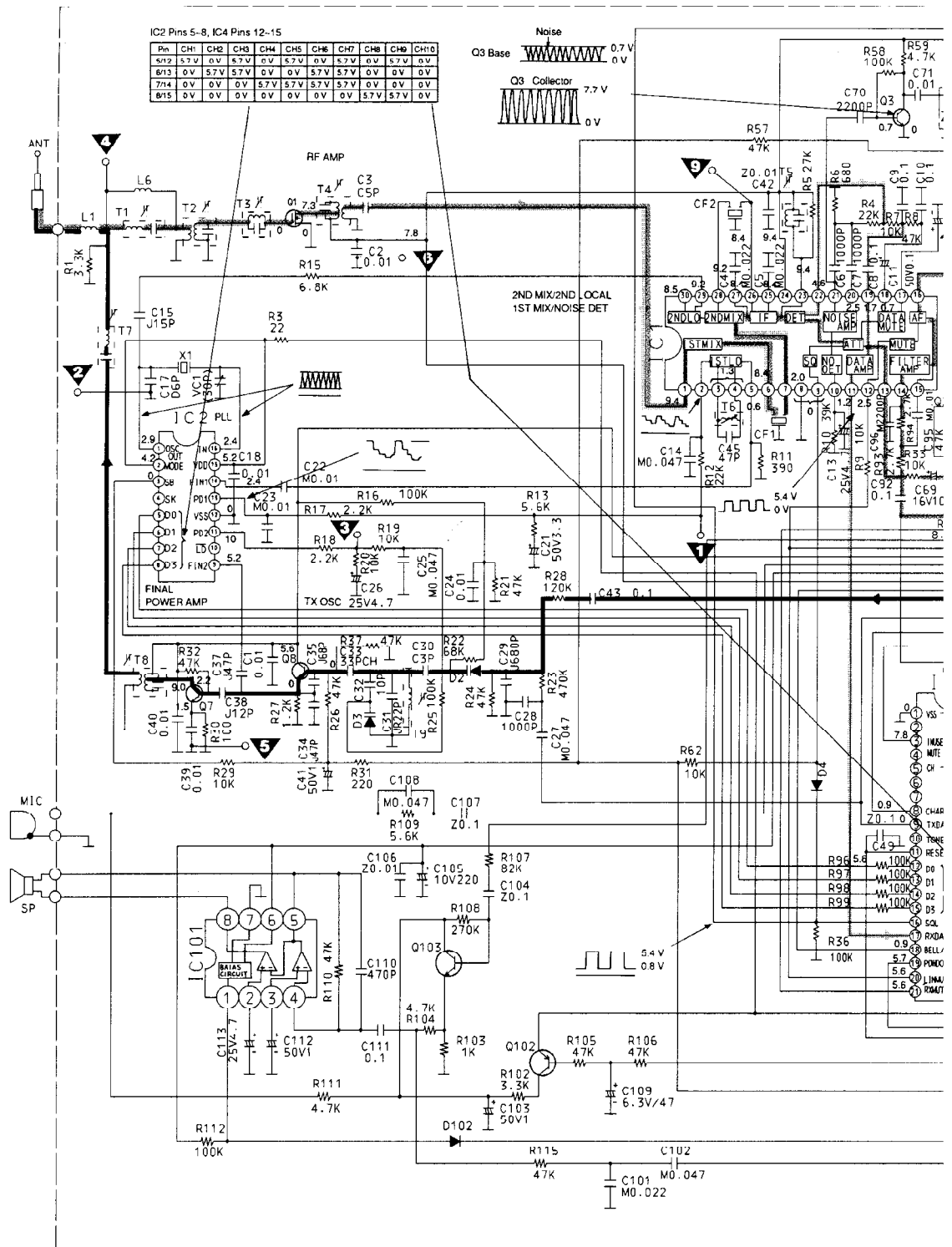
Pin No.	Mark	Description	High	Low	Pin No.	Mark	Description	High	Low
1		LED/PAGE INT' COM	OFF	ON	23	XO	(32.768 kHz)		
2		DIAL LIGHT	ON	OFF	24	RST	RESET	Normal	RESET
3		Key Strobe			25	SYNC	Not Used		
4		Key Strobe			26		PLL DATA 0		
5		Key Strobe			27		PLL DATA 1		
6	NC	Not Used			28		PLL DATA 2		
7		Key Strobe			29		PLL DATA 3		
8	PB0	Key In 0	Normal	Active	30		Mute Mic	Mute	Unmute
9	PB1	Key In 1	Normal	Active	31		Mute RX	Mute	Unmute
10	PB2	Key In 2	Normal	Active	32	NC	Not Used		
11	PB3	Key In 3	Normal	Active	33		TX POWER	OFF	ON
12	PC0/SBT	Option	Normal	Option	34		SQUELCH	Low	High
13	PC1/SBO	ON/OFF SW	OFF	ON	35		Batt EXE	Enable	Disable
14	PC2/SBI	CHARGE	Normal	CHARGE	36		Batt Low	High	Low
15	PC3/TC20	BEEP CLOCK	Normal	Active	37		RX DATA		
16	SIRQ				38		BEEP CTL	Low	High (Normal)
17	IRQ	CHARGE	Normal	CHARGE	39	NC	Not Used		
18	Vss				40		RX POWER	OFF	ON
19	OSC1	Main Clock			41		LED CH	OFF	ON
20	OSC2	(3.992 MHz)			42		TX DATA	Active	Normal
21	Vdd				43		LED TALK	OFF	ON
22	XI	Sub Clock			44		LED Bat Low/PROG	OFF	ON

CIRCUIT BOARD (KX-T3855H)

(Flow Solder Side View)



SCHEMATIC

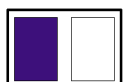


Notes:

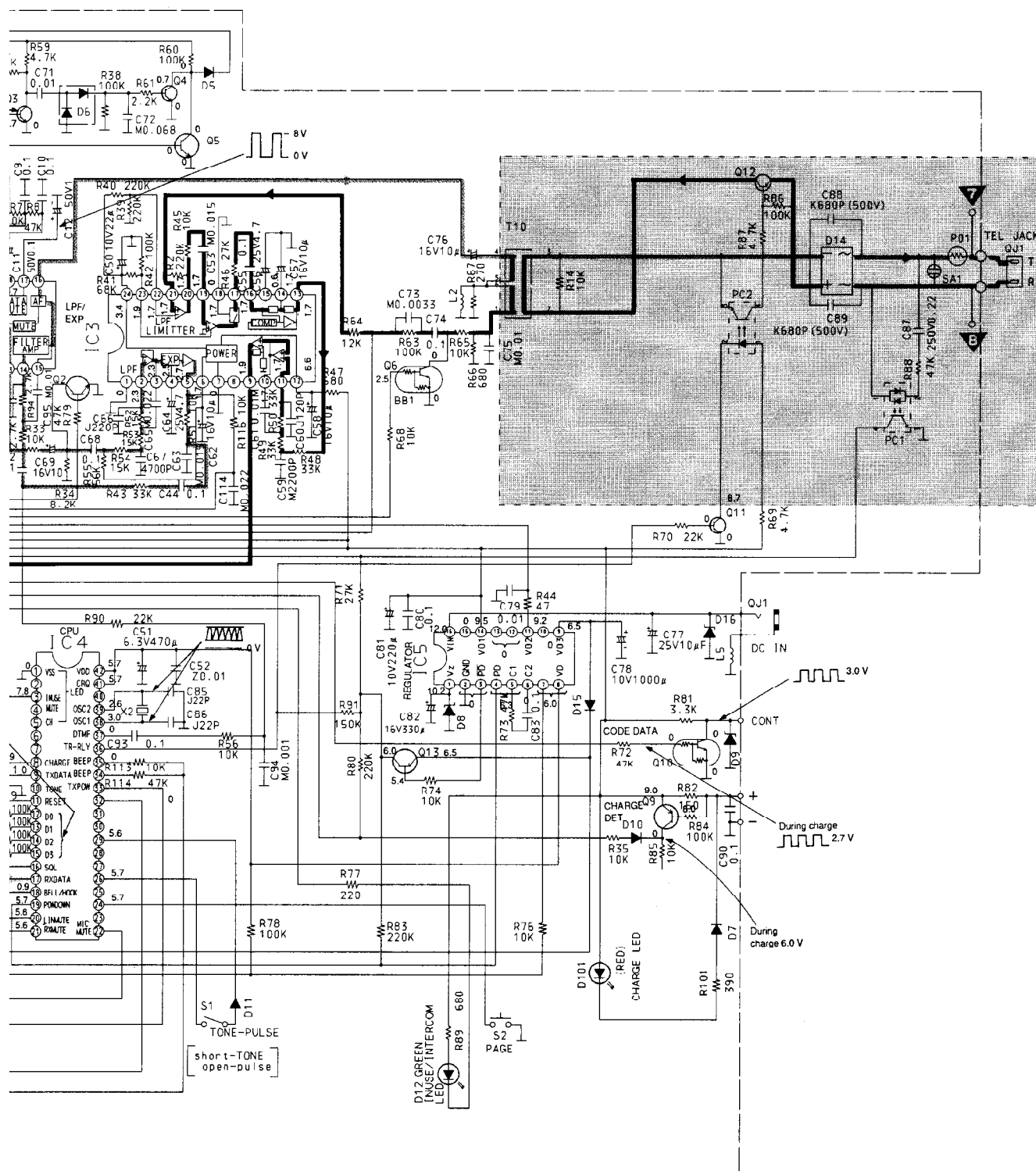
1. S1: Dialing mode selector switch
2. S2: Page/Intercom switch
3. DC voltage measurements are taken with an electronic voltmeter from the negative voltage line. STANDBY position

The voltage of IC1 and IC4: Refer to page 9.

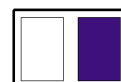
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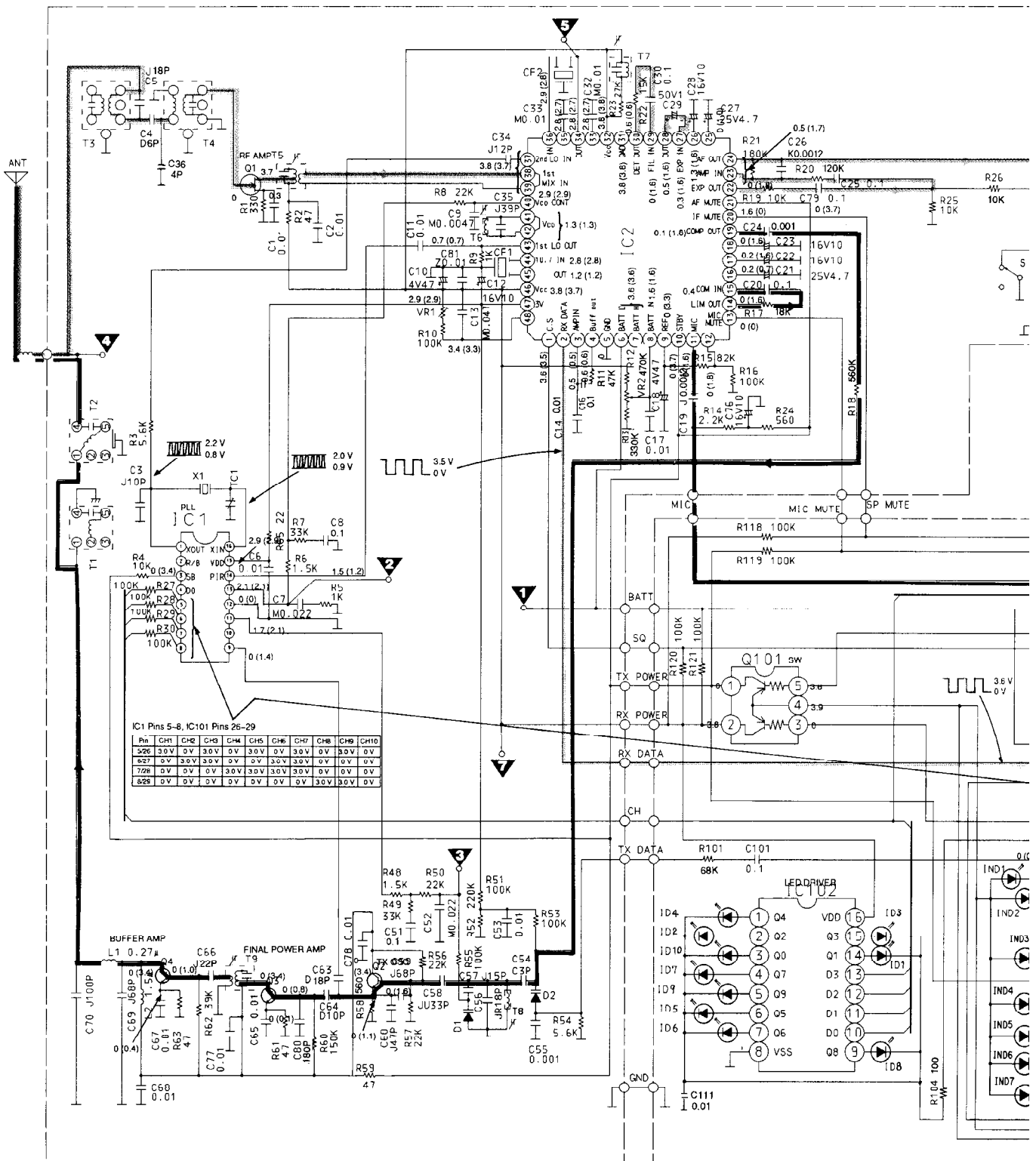
IC DIAGRAM (KX-T3855H)



This schematic diagram may be modified at any time with the development of new technology.



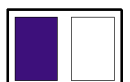
SCHEMATIC DIAGRAM (KX)



Notes:

1. S1: Talk switch
2. S2: Page/Intercom switch
3. S3: Pause switch
4. S4: Flash switch
5. S5: Redial switch
6. S6: Auto switch
7. S7: Program switch
8. S103: Channel switch
9. S104: Power/Ringer switch
10. S105: Volume selector switch

11. This schematic diagram may be modified at any time with the development of new technology.



The schematic diagram illustrates the internal circuitry of a portable radio receiver. Key components and their connections include:




- Power Supply:** A 3.6V battery (BATT) provides power to the circuit. A 10K resistor (R25) is connected to the battery. A 10K resistor (R26) is connected to the speaker (SP).
- Speaker and Output:** The speaker (SP) is connected to the output stage. A 10K resistor (R26) is connected to the speaker. A 10K resistor (R25) is connected to the battery.
- IC101 (CPU):** The central microcontroller. It has multiple pins for data, control, and power. Pins are labeled with functions like TX VDD, TX DATA, TX LED, INT LED, DIAL LIGHT, NC, BEEP OUT, CHARGE, ON/OFF, OPTION, PALUSE, RDL, FI, AUTO, TALK, CH, PRG, PAGE, and LS1.
- IC103 (RESET DET):** A reset detection IC. It has pins for RESET DET, ON/OFF, VCC, BATT, and ON/OFF.
- Capacitors:** Various capacitors are used for filtering and timing, including C49 (6V47), C50 (0.01), C107 (4V722n), C108 (0.01), C110 (0.01), C104 (20.1), C105 (J10P), and C109 (0.01).
- Resistors:** Numerous resistors are used for biasing and signal conditioning, including R25 (10K), R26 (10K), R104 (100), R105 (47K), R111 (5.8K), R112 (100K), R114 (22), R115 (4.7K), R117 (3.3K), R122 (100K), and R125 (220).
- Diodes:** Several diodes are used for rectification and protection, including D103, D113, D114, D115, D117, D118, and D119.
- Other Components:** A speaker (SP), a microphone (MIC), a ringer driver (Q103), and a charge contact (D115, D117, D118, D119) are also shown.

OPTION DIODE

DA	CH10
DB	CH5

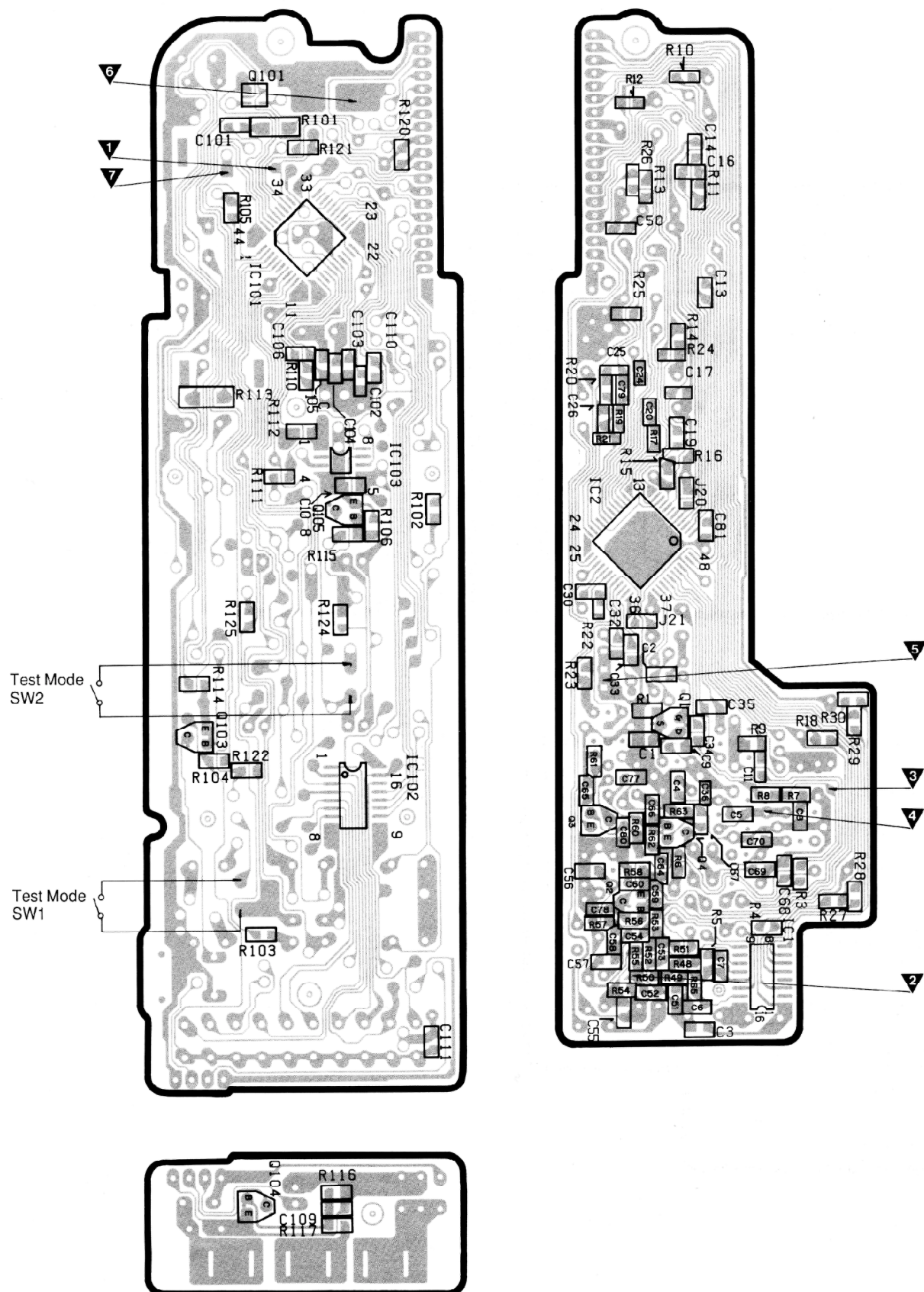
CHARGE CONTACT

During charge mode

 TX Signal
 RX Signal
 Data Signal



(Flow Solder Side View)



ADJUSTMENTS (KX-T3855H)

Unit Condition

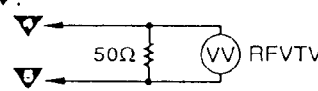
1. Remove the antenna lead wire from P.C. Board of the base unit.
2. Connect the AC adaptor (KX-A10) plug into DC IN jack and the other end into a power outlet (AC 120 V, 60 Hz).

How to set the test mode:

Connect the diode between pin 25 and pin 29 of IC4.

SW1	Test Mode
Twice ON	CH 5 IN USE

When replacing these parts, adjust as shown below table.

Replace Parts	Adjustment Items	Test Mode	Adjustment Points	Procedure
IC1, T6	(A) Phase Detector Voltage Adjustment (RX)	CH5 IN USE	T6	<ol style="list-style-type: none"> 1. Connect the Digital Voltmeter to $\nabla-\nabla$. 2. Adjust T6 (counterclockwise) so that the reading of the Digital Voltmeter is $3.2\text{ V} \pm 0.1\text{ V}$.
D2, D3, T9	(B) Phase Detector Voltage Adjustment (TX)	CH5 IN USE	T9	<ol style="list-style-type: none"> 1. Connect the Digital Voltmeter to $\nabla-\nabla$. 2. Adjust T9 (counterclockwise) so that the reading of the Digital Voltmeter is $3.2\text{ V} \pm 0.1\text{ V}$.
T7, T8, VC1, X1	(C) Frequency Adjustment (TX)	CH5 IN USE	T7, T8 VC1	<ol style="list-style-type: none"> 1. Connect the RF VTVM to $\nabla-\nabla$. 2. Adjust T7 and T8 for maximum output on RF VTVM. 3. Connect the frequency counter to $\nabla-\nabla$. 4. Adjust VC1 so that the reading of the frequency counter is $46.970\text{ MHz} \pm 300\text{ Hz}$.
T8, Q7	(D) Power Adjustment (TX)	CH5 IN USE	T8	<ol style="list-style-type: none"> 1. Connect the RF VTVM (connect 50Ω resistor) to $\nabla-\nabla$.  2. Adjust T8 (clockwise) so that the reading of the RF VTVM is $95\text{ mV} \pm 15\text{ mV}$.
T1, T2, T3, T4, Q1, T5	(E) RF Adjustment (RX)	CH5 IN USE	T5 T1, T2, T3, T4	<ol style="list-style-type: none"> 1. Connect S.S.G. to $\nabla-\nabla$. 2. Connect the loop simulator and AF VTVM to $\nabla-\nabla$. Connect the RF VTVM to ∇-Ground. 3. Apply a $60\text{ dB}\mu\text{V}$ output from S.S.G. (modulation frequency 1 kHz, dev. 3 kHz). 4. Apply a DC 48 V from loop simulator. 5. Adjust T5 so that the reading of the AF VTVM is maximum output. 6. Apply a $40\text{ dB}\mu\text{V}$ output from S.S.G. (modulation frequency 1 kHz, dev. 3 kHz), and adjust T1, T2, T3 and T4 (in that order) so that reading of the RF VTVM is maximum output.

Flow Solder Side View

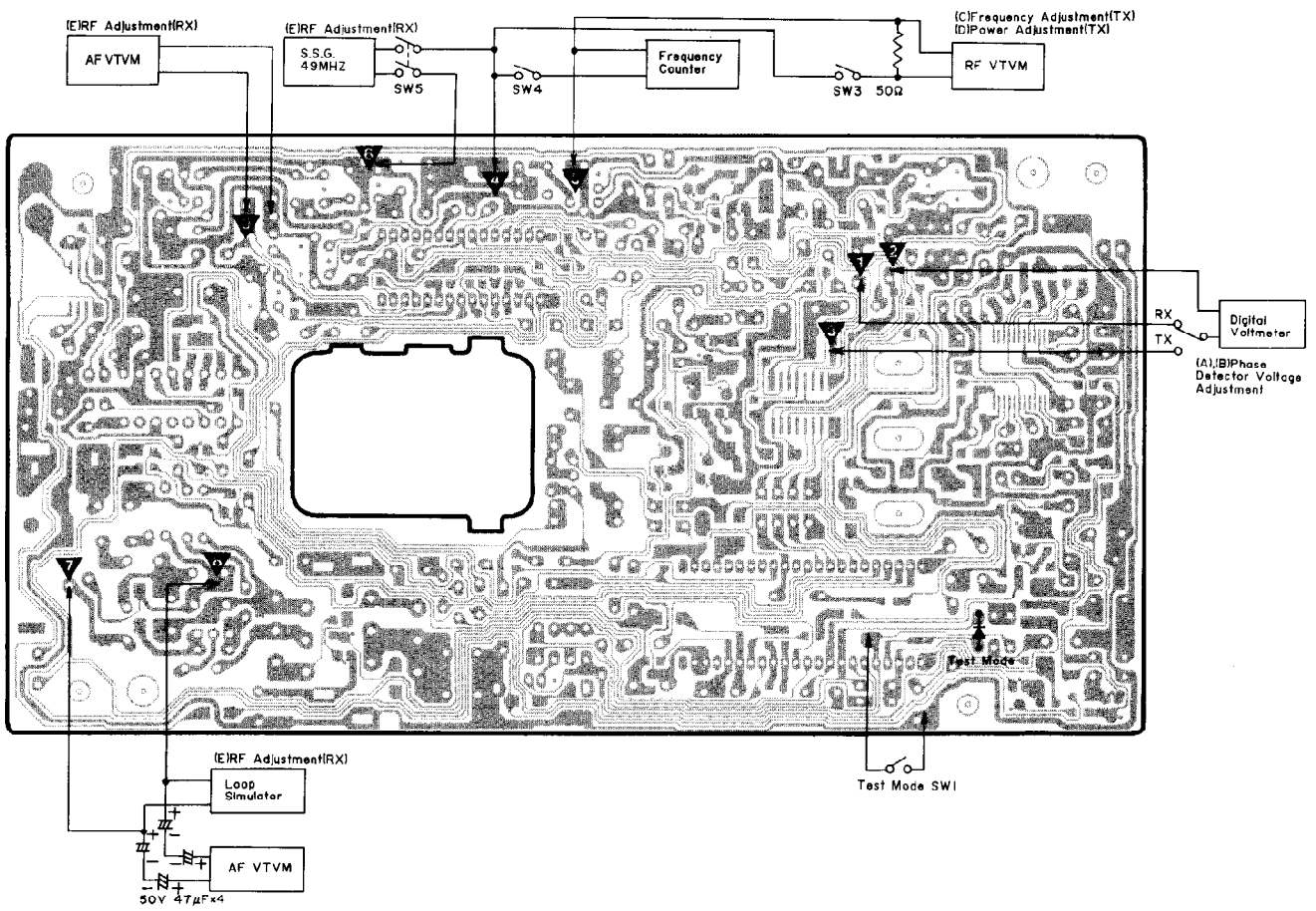
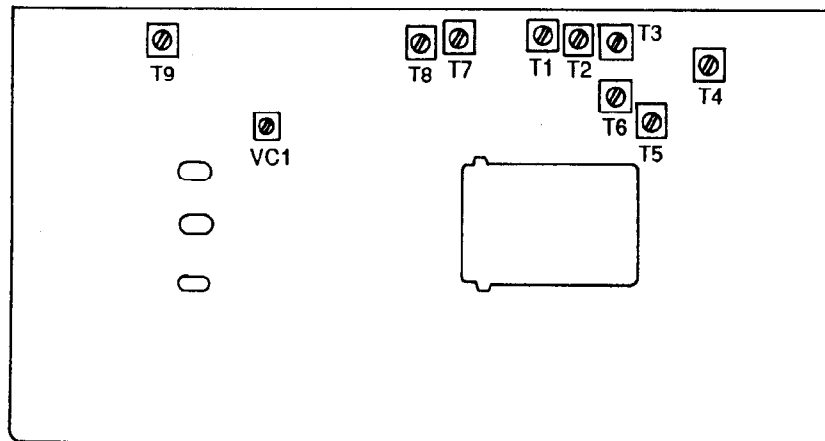


Fig. 13

Component View



ADJUSTMENTS (KX-T3855R)

Unit Condition:

1. Remove the antenna lead wire from P.C. Board of portable handset.
2. Power Supply: DC 3.9 V
3. Power/Ringer switch: ON
4. Volume Selector: NORMAL
5. Speaker Load: 130Ω

How to set the test mode.

1. CH10 Test Mode

SW1, 2, 12, Talk Switch OFF

SW1 ON

SW12 ON (Stand-By)

Talk Switch ON (Talk)

2. CH5 Test Mode

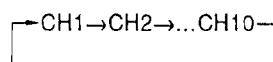
SW1, 2, 12, Talk Switch OFF

SW2 ON

SW12 ON (Stand-By)

Talk Switch ON (Talk)

3. How to change CH from Test Mode.
Press the channel button.



When replacing these parts, adjust as shown below table.

Replace Parts	Adjustment Items	Test Mode	Adjustment Points	Procedure
VR2	(A) Battery Low Adjustment	CH10 Talk	VR2	<ol style="list-style-type: none"> 1. Connect the oscilloscope to ∇-Ground. 2. Set the power supply voltage to DC 3.57 V, and adjust VR2 so that the reading of oscilloscope is $1\text{ V} \pm 0.3\text{ V}$.
IC2, TC1, X1, D1, T8	(B) TX VCO Voltage Adjustment	CH10 Talk	T8	<ol style="list-style-type: none"> 1. Connect the digital voltmeter to ∇-Ground. 2. Adjust T8 so that the reading of digital voltmeter is $2.0\text{ V} \pm 0.1\text{ V}$.
IC2, IC1, X1, T6	(C) RX VCO Voltage Adjustment	CH10 Talk	T6	<ol style="list-style-type: none"> 1. Connect the digital voltmeter to ∇-Ground. 2. Adjust T6 so that the reading of digital voltmeter is $2.1 \pm 0.1\text{ V}$.
TC1, X1, IC2	(D) TX Frequency Adjustment	CH10 Talk	TC1	<ol style="list-style-type: none"> 1. Connect the frequency counter to ∇-Ground. 2. Adjust TC1 so that the reading of frequency counter is $49.970\text{ MHz} \pm 100\text{ Hz}$.
T2, T9	(E) TX output Adjustment	CH10 Talk	T9, T2	<ol style="list-style-type: none"> 1. Connect the RF VTVM to ∇-Ground. 2. Adjust T9 and T2 for maximum output on RF VTVM.
T5, T4, T3, T7	(F) RX Adjustment	CH5 Talk	<div>T7</div> <div>T5, T4, T3</div>	<ol style="list-style-type: none"> 1. Connect the S.S.G to ∇-Ground. 2. Connect the RF VTVM to ∇-Ground. Connect the AF VTVM to ∇-Ground. 3. Apply a $60\text{ dB}\mu\text{V}$ output from S.S.G. (modulation frequency 1 kHz, dev. 3 kHz) 4. Adjust T7 so that the reading of AF VTVM is maximum output. 5. Apply a $40\text{ dB}\mu\text{V}$ output from S.S.G. (modulation frequency 1 kHz, dev. 3 kHz) 6. Adjust T5, T4 and T3 (in that order) so that the reading of RF VTVM is maximum output.

When replacing these parts, adjust as shown below table

Replace Parts	Adjustment Items	Test Mode	Adjustment Points	Procedure
VR1	(G) Carrier Sensitivity Adjustment	CH5 Stand-By	VR1	1. Connect the oscilloscope to ∇ -Ground. 2. Connect the S.S.G. to ∇ -Ground. 3. Apply a 13 dB μ V output from S.S.G. and adjust VR1 so that oscilloscope is low level.
Refer to page 35.	(H) Data Modulation of Confirmation	CH10 Talk	—	1. Connect the FM deviation meter to ∇ -Ground. 2. Keep pressing the flash button. Confirm for a 4~8 kHz FM Deviation Meter reading.

Flow Solder Side View

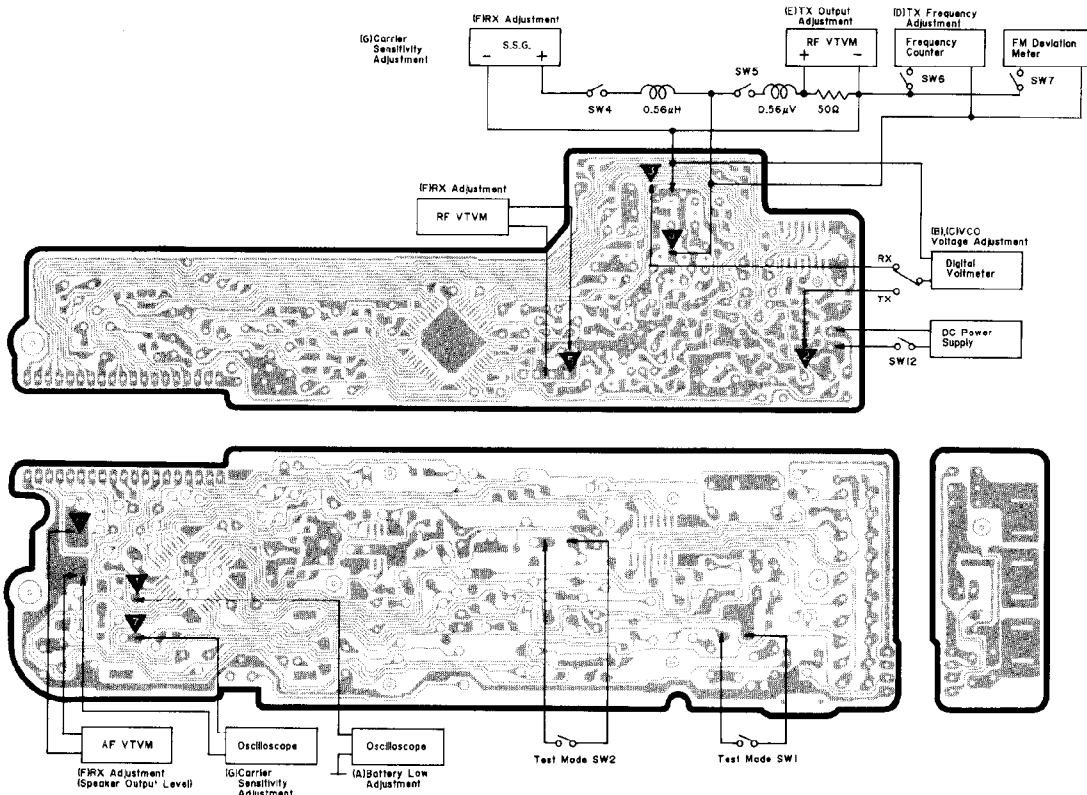
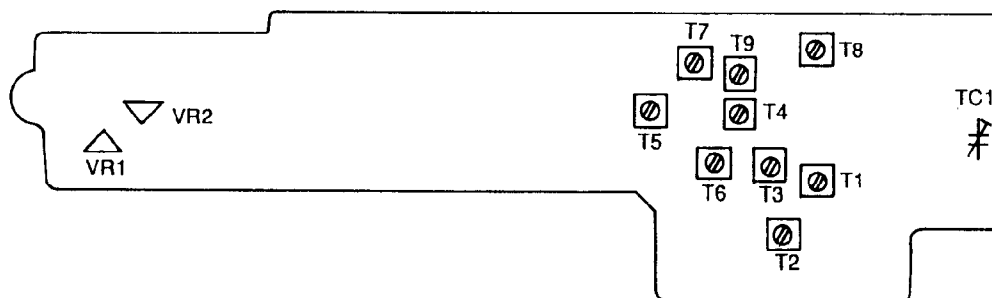


Fig. 15

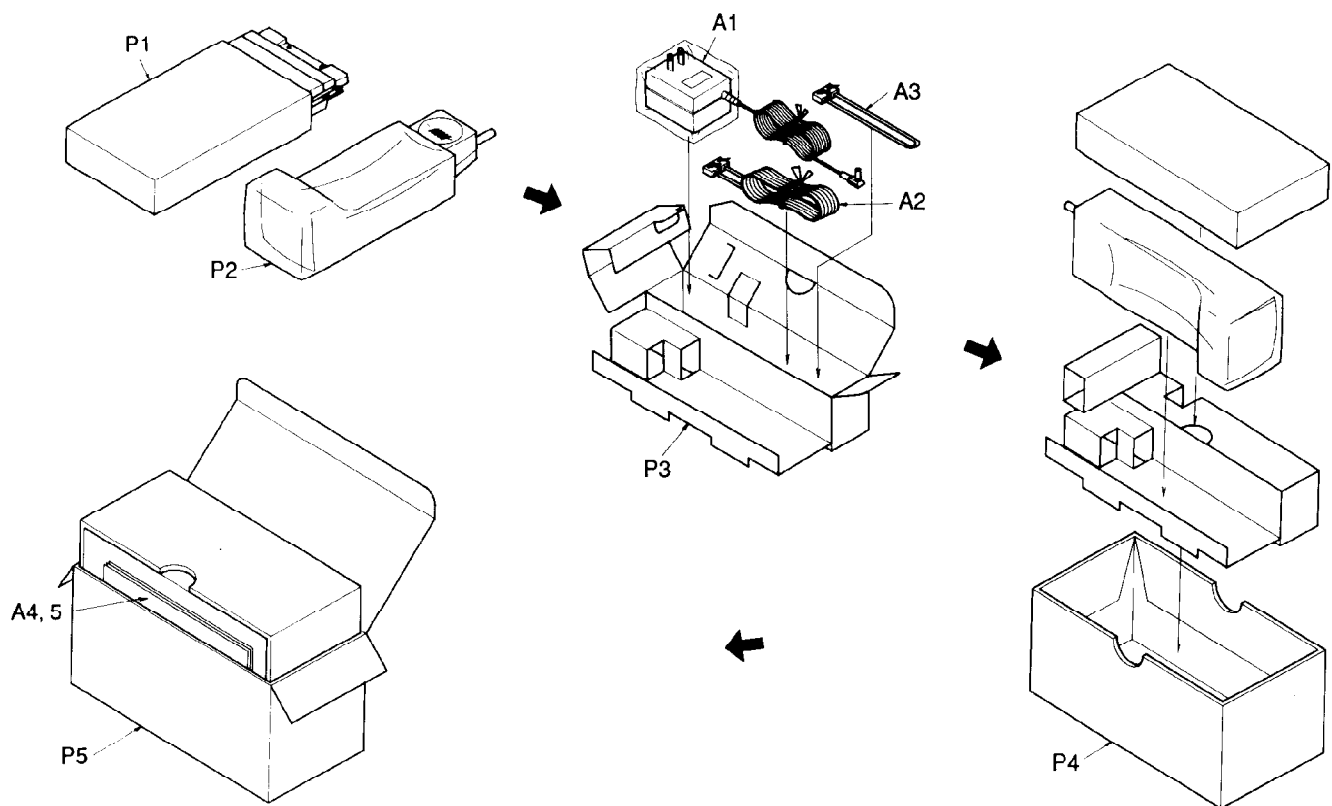
Component View



FREQUENCY TABLE (MHz)

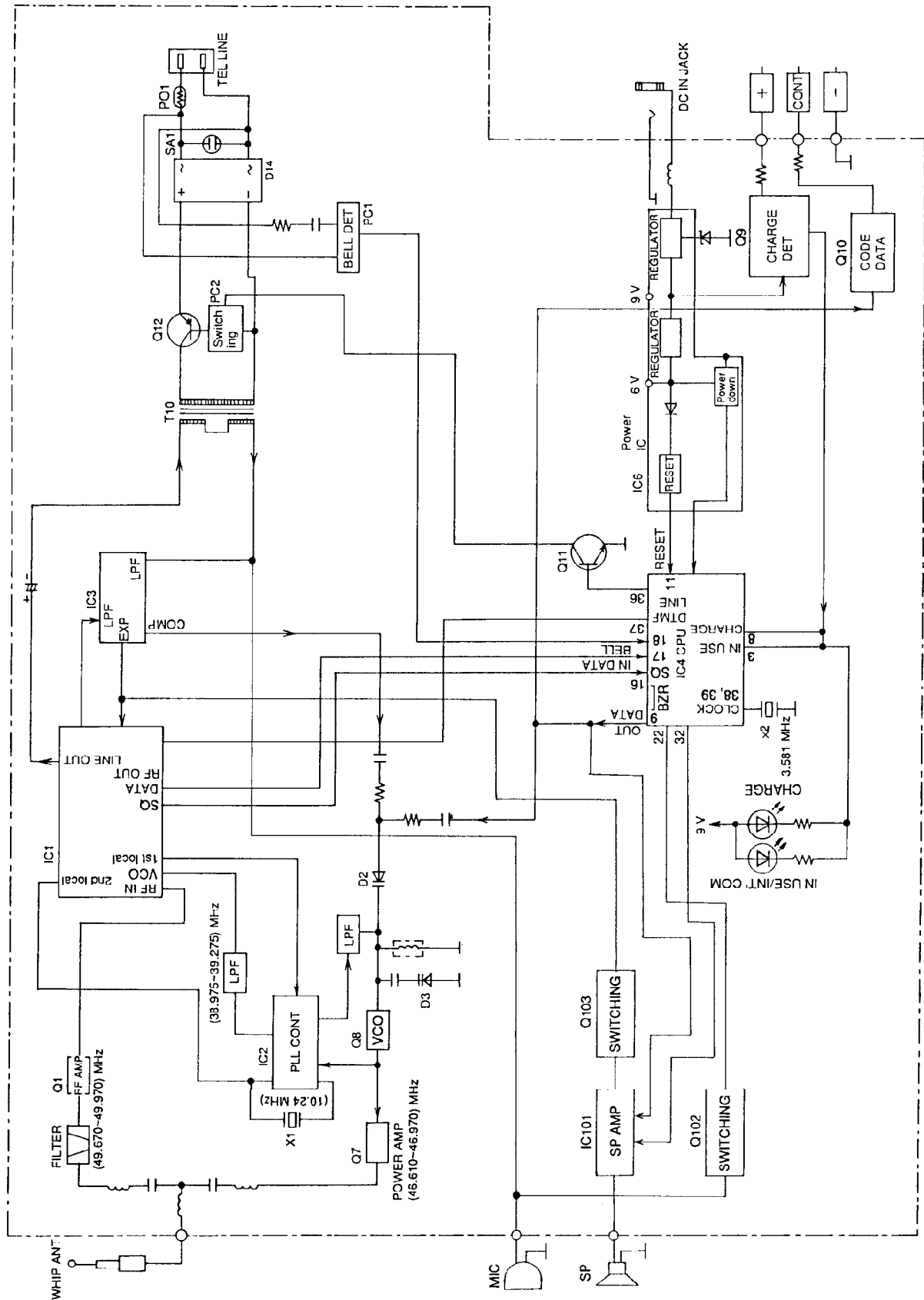
	KX-T3855H		KX-T3855R	
	Transmit Frequency	Receive Frequency	Transmit Frequency	Receive Frequency
CH1	46.610	49.670	49.670	46.610
CH2	46.630	49.845	49.845	46.630
CH3	46.670	49.860	49.860	46.670
CH4	46.710	49.770	49.770	46.710
CH5	46.730	49.875	49.875	46.730
CH6	46.770	49.830	49.830	46.770
CH7	46.830	49.890	49.890	46.830
CH8	46.870	49.930	49.930	46.870
CH9	46.930	49.990	49.990	46.930
CH10	46.970	49.970	49.970	46.970

ACCESSORIES AND PACKING MATERIALS



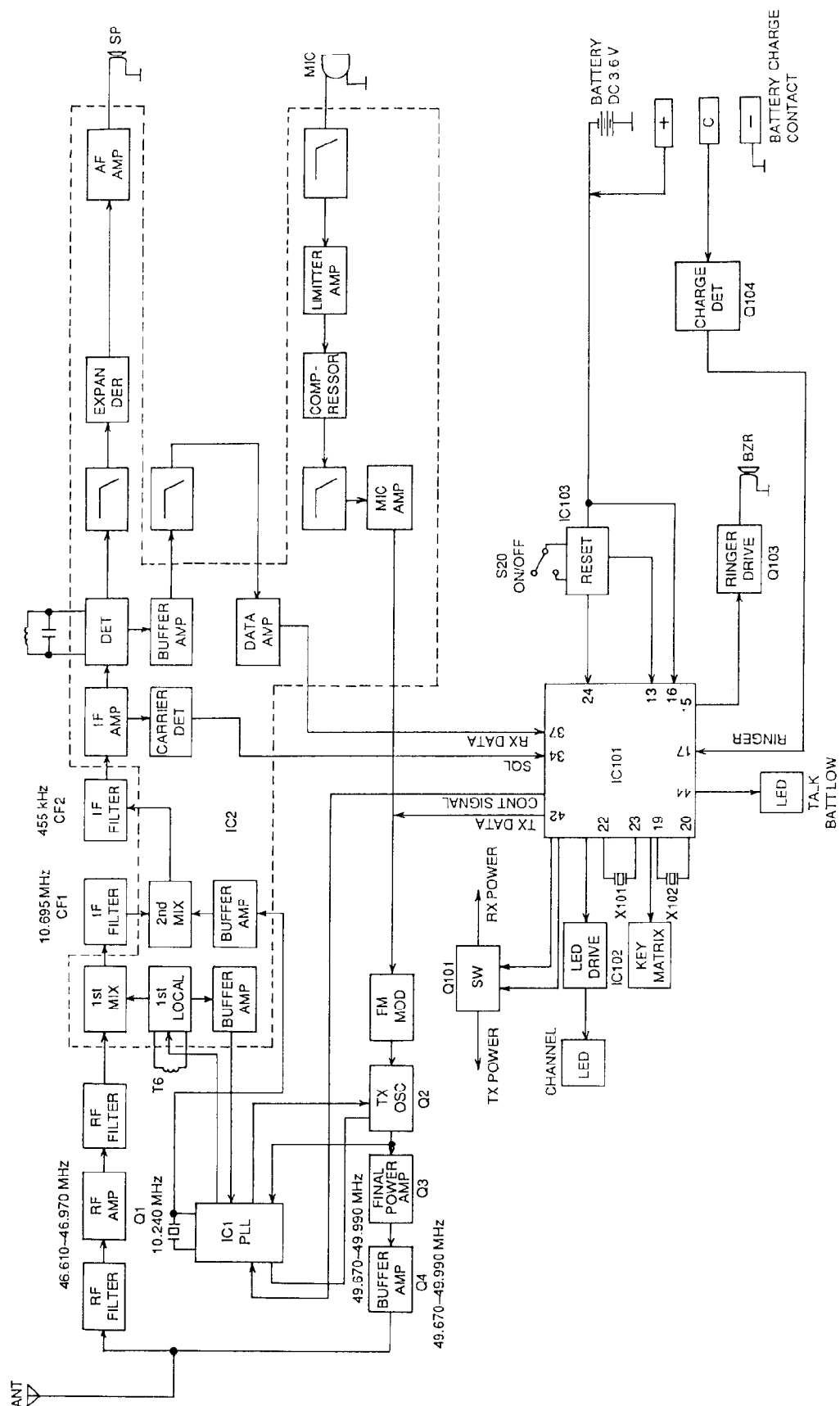
CIRCUIT EXPLANATION (KX-T3855H)

■ BLOCK DIAGRAM

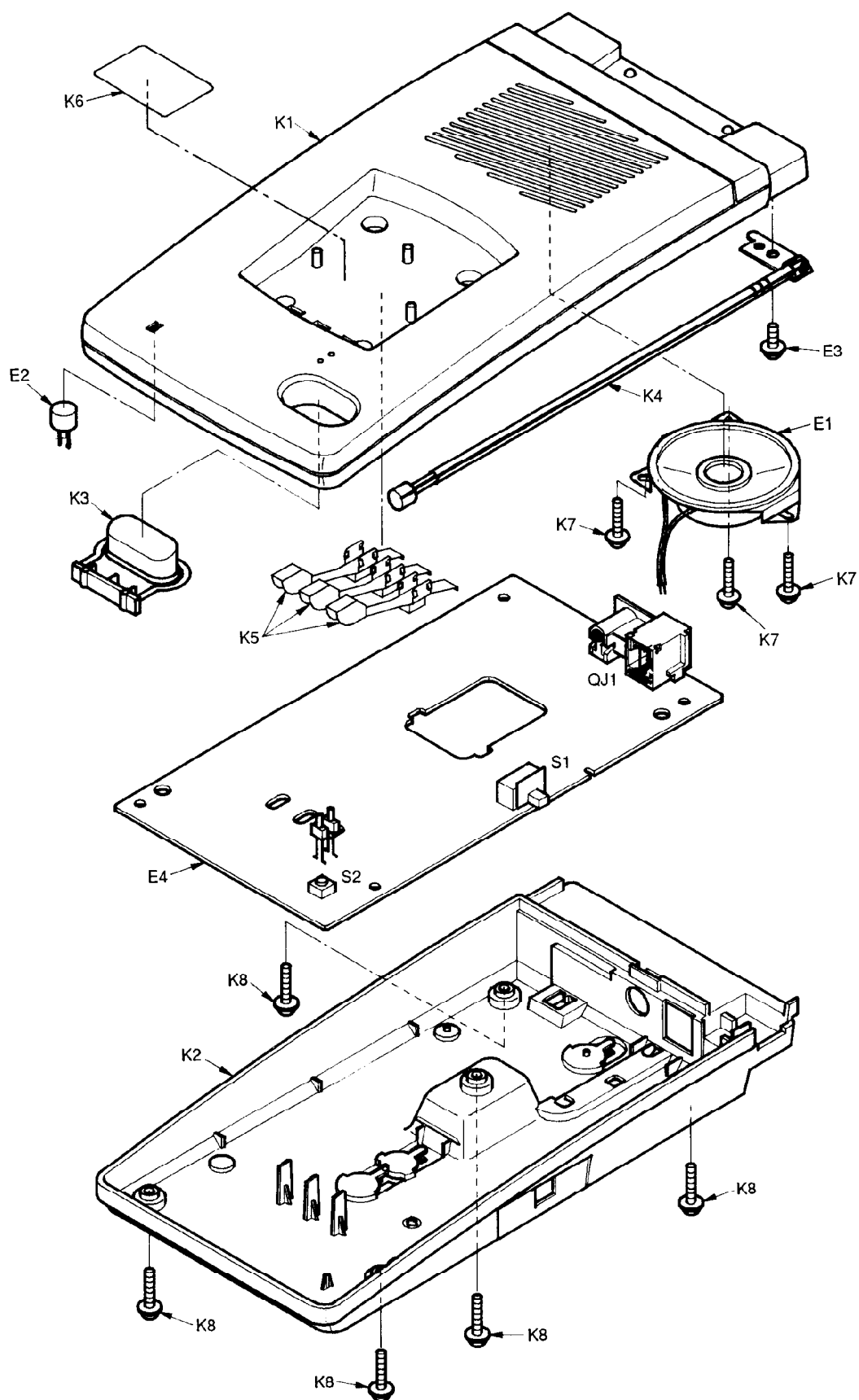


CIRCUIT EXPLANATION (KX-T3855R)

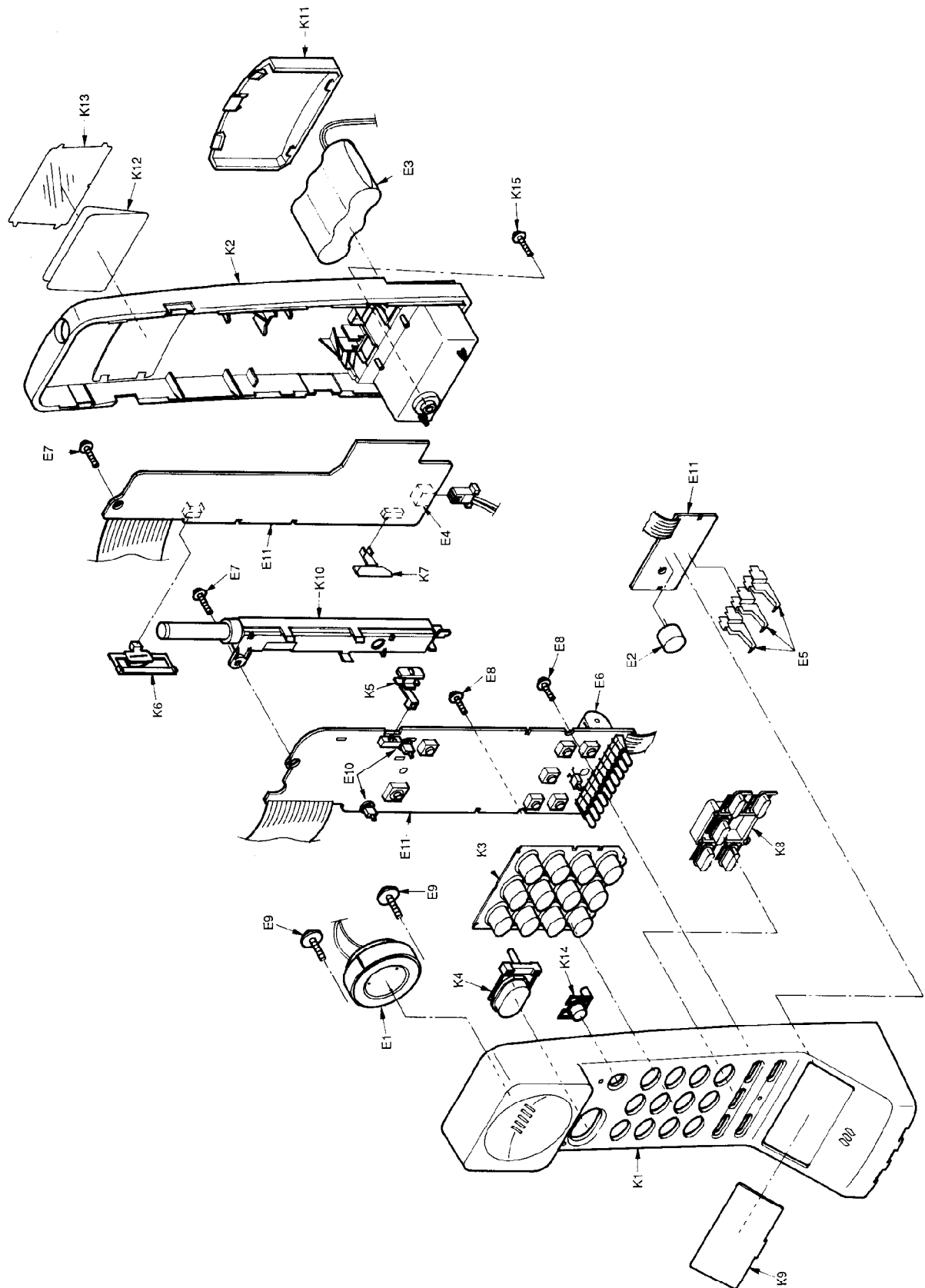
■ BLOCK DIAGRAM



CABINET AND ELECTRICAL PARTS LOCATION (KX-T3855H)



CABINET AND ELECTRICAL PARTS LOCATION (KX-T3855R)



REPLACEMENT PARTS LIST

Model KX-T3855H

Notes:

1. RTL (Retention Time Limited)

The marking (RTL) Indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time.

The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention.

After the end of this period, the assembly will no longer be available.

2. Important safety notice.

Components identified by the Δ mark special characteristics important for safety. When replacing any of these components, use only manufacture's specified parts.

3. The S mark indicates service standard parts and may differ from production parts.

4. RESISTORS & CAPACITORS

Unless otherwise specified.

All resistors are in ohms (Ω) k=1000 Ω , M=1000k Ω

All capacitors are in MICRO FARADS (μ F) P= μ F

*Type & Wattage of Resistor

Type

ERC:Solid	ERX:Metal Film	PQ4R:Carbon
ERD:Carbon	ERG:Metal Oxide	ERS:Fusible Resistor
ERD:Carbon	ER0:Metal Film	ERF:Cement Resistor

Wattage

10,16:1/8W	14,25:1/4W	12:1/2W	1:1W	2:2W	3:3W
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*Type & Voltage of Capacitor

Type

ECFD:Semi-Conductor	ECED,ECKD,ECBT,PQCB: Ceramic
ECQS:Styrol	ECQE,ECQV,ECQG : Polyester
PQCUV:Chip	ECEA,ECSZ : Electrolytic
ECQMS:Mica	ECQP : Polypropylene

Voltage

ECQ Type	ECQG ECQV Type	ECSZ Type	Others	
1H: 50V	05: 50V	0F:3.15V	0J :6.3V	1V :35V
2A:100V	1:100V	1A:10V	1A :10V	50,1H:50V
2E:250V	2:200V	1V:35V	1C :16V	1J :63V
2H:500V		0J:6.3V	1E,25:25V	2A :100V

Ref. No.	Part No.	Part Name & Description	Pcs
INTEGRATED CIRCUITS, TRANSISTORS & DIODES			
IC1	AN6169K	IC	1
IC2	PQVI371004FT	IC	1
IC3	AN6165SB	IC	1
IC4	MN158413AKPT	IC	1
IC5	AN8077NK	IC	1
IC101	PQVIMC34119M	IC	1
Q1	2SK544	TRANSISTOR(SI)	1
Q2-5,11,103	2SD601R	TRANSISTOR(SI)	6
Q6	PQVTFB1A4M	TRANSISTOR(SI)	1
Q7,8	2SC2412K	TRANSISTOR(SI)	2
Q9	2SB709A	TRANSISTOR(SI)	1
Q10	PQVTDTC144ES	TRANSISTOR(SI)	1
Q12	2SA1776P	TRANSISTOR(SI)	1
Q13	2SB709A	TRANSISTOR(SI)	1
Q102	2SB709A	TRANSISTOR(SI)	1
D2,3	PQVD1SV145	DIODE(SI)	2
D4,5,7,10,11	1SS119	DIODE(SI)	5
D6	MA143	DIODE(SI)	1
D8	MA4100	DIODE(SI)	1
D9	MA4110	DIODE(SI)	1
D12	LN322GPH	LED	1
D14	PQVDS1ZB40F1	DIODE(SI)	1
D15	1SS119	DIODE(SI)	1
D16	MA4200	DIODE(SI)	1

Ref. No.	Part No.	Part Name & Description	Pcs
D101	LN222RPH	LED	1
D102	1SS119	DIODE(SI)	1
COILS AND TRANSFORMERS			
L1	PQLQZK1R8M	COIL	1
L2	PQLQZ1104J	COIL	1
L5	ELEPK330KA	COIL	1
L6	PQLQZMR56K	COIL	1
T1	PQLA7N2	COIL	1
T2	EIL7EL002P	COIL	1
T3	EIL7EL001P	COIL	1
T4	PQLA7A7	COIL	1
T5	PQLI2B201	I.F. TRANSFORMER	1
T6	PQLA7A20	COIL	1
T7	PQLA7N1	COIL	1
T8	PQLA7A9	COIL	1
T9	PQLA7A22	COIL	1
T10	PQLT8F3A	TRANSFORMER Δ	1
SWITCHES			
S1	PQSS2A27W	SWITCH, DIALING MODE SELECTOR	1
S2	EVQQJJ05Q	SWITCH, PAGE/INTERCOM	1
OTHERS			
CF1	RVFSFE107MSR	CERAMIC FILTER	1
CF2	PQVFCFW455E	CERAMIC FILTER	1
VC1	ECHLA030E53	TRIMMER CAPACITOR	1
X1	PQVCJ10240C5	CRYSTAL, 10.240MHz	1
X2	PQVCJ3581N9Z	CRYSTAL, 3.581MHz	1
SA1	PQVDSAE310F1	VARISTOR (SURGE ABSORBER) Δ	1
PC1	PQVIPC814K	PHOTO ELECTRIC TRANSDUCER Δ	1
PC2	PQVITLP627	PHOTO ELECTRIC TRANSDUCER Δ	1
PO1	PQRPBC120N	POSISTOR Δ	1
QJ1	PQJ2HA1Z	JACK, TEL/DC IN Δ	1
CABINET PARTS			
K1	PQKM10037Z1	CABINET BODY	1
K2	PQYF10007X1	CABINET PLATE	1
K3	PQBC1022Y1	BUTTON	1
K4	XEAPQK170BA	ROD ANTENNA	1
K5	PQJT10007Z	METAL PARTS	3
K6	PQQT10111Z	INDICATION LABEL	1
K7	XTW3+S10P	SCREW	3
K8	XTW3+S14P	SCREW	5
ELECTRICAL PARTS			
E1	PQAS5P12Z	SPEAKER	1
E2	PQJM124Z	MICROPHONE	1
E3	XTW3+CS12P	SCREW	1
E4	PQWPT3855RM	P.C. BOARD ASS'Y (RTL)	1

Ref. No.	Part No.	Value	Ref. No.	Part No.	Value
RESISTORS					
R1	PQ4R10XJ332	3.3K	R58	PQ4R18XJ104	100K
R2	PQ4R10XJ224	220K	R59	PQ4R18XJ472	4.7K
R3	PQ4R10XJ220	22	R60	PQ4R18XJ104	100K
R4	PQ4R10XJ223	22K	R61	PQ4R10XJ222	2.2K
R5	PQ4R10XJ273	27K	R62	ERDS2TJ103	10K
R6	PQ4R10XJ681	680	R63	PQ4R10XJ104	100K
R7	PQ4R10XJ103	10K	R64	PQ4R10XJ123	12K
R8	ERDS2TJ473	47K	R65	PQ4R10XJ103	10K
R9	ERDS2TJ103	10K	R66	PQ4R10XJ681	680
R10	PQ4R10XJ393	39K	R67	ERDS2TJ271	270
R11	PQ4R10XJ391	390	R68	PQ4R18XJ103	10K
R12	PQ4R18XJ223	22K	R69	ERDS2TJ472	4.7K
R13	ERDS2TJ562	5.6K	R70	PQ4R10XJ223	22K
R14	PQ4R10XJ103	10K	R71	PQ4R10XJ273	27K
R15	ERDS2TJ682	6.8K	R72	PQ4R18XJ473	47K
R16	ERDS2TJ104	100K	R73	PQ4R10XJ473	47K
R17	PQ4R10XJ222	2.2K	R74	PQ4R10XJ103	10K
R18	ERDS2TJ222	2.2K	R76	PQ4R10XJ103	10K
R19	PQ4R10XJ103	10K	R77	PQ4R18XJ221	220
R20	PQ4R10XJ103	10K	R78	PQ4R10XJ104	100K
R21	PQ4R10XJ473	47K	R79	PQ4R18XJ473	47K
R22	PQ4R10XJ683	68K	R80	ERDS2TJ224	220K
R23	PQ4R10XJ474	470K	R81	PQ4R10XJ332	3.3K
R24	ERDS2TJ473	47K	R82	ERDS2TJ151	150
R25	PQ4R10XJ104	100K	R83	ERDS2TJ224	220K
R26	ERDS2TJ473	47K	R84	PQ4R10XJ104	100K
R27	PQ4R10XJ122	1.2K	R85	PQ4R10XJ103	10K
R28	ERDS2TJ124	120K	R86	ERDS2TJ104	100K Δ
R29	PQ4R10XJ103	10K	R87	ERDS2TJ472	4.7K Δ
R30	PQ4R10XJ101	100	R88	ERDS2TJ473	47K Δ
R31	ERDS2TJ221	220	R89	PQ4R10XJ681	680
R32	PQ4R10XJ473	47K	R90	PQ4R10XJ223	22K
R33	PQ4R10XJ103	10K	R91	PQ4R10XJ154	150K
R34	PQ4R10XJ822	8.2K	R93	PQ4R18XJ272	2.7K
R35	PQ4R10XJ103	10K	R94	PQ4R10XJ272	2.7K
R36	PQ4R10XJ104	100K	R96	PQ4R18XJ104	100K
R37	PQ4R10XJ473	47K	R97	PQ4R18XJ104	100K
R38	PQ4R10XJ104	100K	R98	PQ4R18XJ104	100K
R39	PQ4R10XJ224	220K	R99	PQ4R18XJ104	100K
R40	PQ4R10XJ224	220K			
R41	PQ4R10XJ683	68K	R101	PQ4R10XJ391	390
R42	PQ4R10XJ104	100K	R102	PQ4R10XJ332	3.3K
R43	PQ4R10XJ333	33K	R103	ERDS2TJ102	1K
R44	ERDS2TJ470	47	R104	PQ4R10XJ472	4.7K
R45	PQ4R10XJ103	10K	R105	PQ4R10XJ473	47K
R46	PQ4R10XJ273	27K	R106	PQ4R10XJ473	47K
R47	ERDS2TJ681	680	R107	PQ4R10XJ823	82K
R48	ERDS2TJ333	33K	R108	PQ4R10XJ274	270K
R49	PQ4R10XJ333	33K	R109	ERDS2TJ562	5.6K
R50	ERDS2TJ333	33K	R110	PQ4R10XJ473	47K
R51	ERDS2TJ103	10K	R111	ERDS2TJ472	4.7K
R52	PQ4R10XJ153	15K	R112	PQ4R10XJ104	100K
R53	PQ4R10XJ153	15K	R113	PQ4R10XJ103	10K
R54	PQ4R18XJ153	15K	R114	PQ4R10XJ473	47K
R55	PQ4R10XJ563	56K	R115	PQ4R18XJ473	47K
R56	PQ4R10XJ103	10K	R116	ERDS2TJ103	10K
R57	PQ4R10XJ473	47K			

Ref. No.	Part No.	Value	Ref. No.	Part No.	Value
CAPACITORS					
C1	PQCUV1H103KB	0.01	C60	PQCUV1H121JC	120P
C2	PQCUV1H103KB	0.01	C61	ECUV1H103KB	0.01
C3	ECUV1H050CC	5P	C62	ECEA1CKS100	10
C4	PQCUV1H223KB	0.022	C63	PQCUV1E153MD	0.015
C5	PQCUV1H223KB	0.022	C64	ECEA1HKS4R7	4.7
C6	PQCUV1H102J	0.001	C65	PQCUV1H223KB	0.022
C7	PQCUV1H102J	0.001	C66	PQCUV1H221JC	220P
C8	PQCUV1E104MD	0.1	C67	PQCUV1H472KB	0.0047
C9	PQCUV1E104MD	0.1	C68	ECUV1H104MD	0.1
C10	PQCUV1E104MD	0.1	C69	ECEA1CKS100	10
C11	ECUV1H104MD	0.1	C70	PQCB1C222MX	0.0022
C12	ECEA1HKS010	1	C71	PQCUV1H103KB	0.01
C13	ECEA1HKS4R7	4.7	C72	PQCUV1C683MD	0.068
C14	PQCUV1E473MD	0.047	C73	PQCUV1H332KB	0.0033
C15	ECUV1H150JC	15P	C74	ECUV1H104MD	0.1
C17	PQCUV1H060DC	6P	C75	PQCUV1H103KB	0.01
C18	PQCUV1H103KB	0.01	C76	ECEA1CKS100	10
C21	ECEA1HKS3R3	3.3	C77	ECEA1VKS100	10
C22	PQCUV1H103KB	0.01	C78	ECEA1AU102	1000
C23	PQCUV1H103KB	0.01	C79	PQCUV1H103KB	0.01
C24	PQCUV1H103KB	0.01	C80	PQCUV1E104MD	0.1
C25	PQCUV1E473MD	0.047	C81	ECEA1AU221	220
C26	ECEA1HKS4R7	4.7	C82	ECEA1CU331	330
C27	PQCUV1E473MD	0.047	C83	PQCUV1E104MD	0.1
C28	PQCB1H102KB	0.001	C85	PQCUV1H220JC	22P
C29	PQCB1H681KB	680P	C86	ECUV1H220JC	22P
C30	ECUV1H030CC	3P	C87	ECQE2224KF	0.22 Δ
C31	PQCUV1H220JC	22P	C88	ECKD2H681KB	680P Δ
C32	PQCUV1H100DC	10P	C89	ECKD2H681KB	680P Δ
C33	ECUV1H330JC	33P	C90	ECUV1H104MD	0.1
C34	PQCUV1H470JC	47P	C92	PQCUV1E104MD	0.1
C35	PQCUV1H680JC	68P	C93	PQCUV1E104MD	0.1
C37	PQCB1H470JL	47P	C94	PQCUV1H102J	0.001
C38	PQCUV1H120JC	12P	C95	PQCUV1H103KB	0.01
C39	PQCUV1H103KB	0.01	C96	PQCUV1H222KB	0.0022
C40	PQCUV1H103KB	0.01			
C41	ECEA1HKS010	1	C101	ECUV1H223MD	0.022
C42	PQCB1C103MY	0.01	C102	ECFD1E473KD	0.047
C43	ECUV1H104MD	0.1	C103	ECEA1HKS010	1
C44	PQCUV1E104MD	0.1	C104	ECUV1H104MD	0.1
C45	PQCUV1H470JC	47P	C105	ECEA1AU221	220
C49	PQCUV1E104MD	0.1	C106	PQCUV1H103KB	0.01
C50	ECEA1CKS220	22	C107	PQCUV1E104MD	0.1
C51	ECEA0JU471	470	C108	ECUV1H473MD	0.047
C52	PQCUV1H103KB	0.01	C109	ECEA0JKS470	47
C53	PQCUV1E153MD	0.015	C110	PQCUV1H471JC	470P
C55	PQCUV1E104MD	0.1	C111	ECUV1H104MD	0.1
C56	ECEA1HKS4R7	4.7	C112	ECEA1HKS010	1
C57	ECEA1CKS100	10	C113	ECEA1HKS4R7	4.7
C58	ECEA1CKS100	10	C114	PQCUV1H223KB	0.022
C59	PQCUV1H222KB	0.0022			

REPLACEMENT PARTS LIST

Model KX-T3855R

Notes:

1. RTL (Retention Time Limited)

The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time.

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2. Important safety notice.

Components identified by the Δ mark special characteristics important for safety.

When replacing any of these components, use only manufacture's specified parts.

3. The S mark Indicates service standard parts and may differ from production parts.

4. RESISTORS & CAPACITORS

Unless otherwise specified.

All resistors are in ohms(Ω) k=1000 Ω , M=1000k Ω

All capacitors are in MICRO FARADS(μ F) P= μ F

*Type & Wattage of Resistor

Type

ERC:Solid	ERX:Metal Film	PQ4R:Carbon
ERD:Carbon	ERG:Metal Oxide	ERS:Fusible Resistor
PQRD:Carbon	ER0:Metal Film	ERF:Cement Resistor

Wattage

10,16:1/8W	14,25:1/4W	12:1/2W	1:1W	2:2W	3:3W
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*Type & Voltage of Capacitor

Type

ECFD:Semi-Conductor	ECCD,ECKD,ECBT,PQCB: Ceramic
ECQS:Styrol	ECQE,ECQV,ECQG : Polyster
PQCUV:Chip	ECEA,ECSZ : Electrolytic
ECQMS:Mica	ECQP : Polypropylene

Voltage

ECQ Type	ECQG ECQV Type	ECSZ Type	Others	
1H: 50V	05: 50V	0F:3.15V	0J :6.3V	1V :35V
2A:100V	1:100V	1A:10V	1A :10V	50,1H:50V
2E:250V	2:200V	1V:35V	1C :16V	1J :63V
2H:500V		0J:6.3V	1E,25:25V	2A :100V

Ref. No.	Part No.	Part Name & Description	Pcs
INTEGRATED CIRCUITS, TRANSISTORS & DIODES			
IC1	PQV1371004FT	IC	1
IC2	AN6147FBP	IC	1
IC101	MN150402KEA	IC	1
IC102	PQVIMC4028BF	IC	1
IC103	PQVISC78184D	IC	1
Q1	2SK543	TRANSISTOR(SI)	1
Q2,4	2SC2295	TRANSISTOR(SI)	2
Q3	2SC2412K	TRANSISTOR(SI)	1
Q101	XN1116	TRANSISTOR(SI)	1
Q103	2GB709A	TRANSISTOR(SI)	1
Q104,105	2SD601R	TRANSISTOR(SI)	2
D1,2	PQVD1SV145	DIODE(SI)	2
D113	MA700A	DIODE(SI)	1
D114	1SS131	DIODE(SI)	1
D115	MA4150	DIODE(SI)	1
D116	MA4068	DIODE(SI)	1
D117~119	1SS119	DIODE(SI)	3
ID1~10	LN28RALXU	LED	10
IND1,3	LN322GPH	LED	2
IND2	LN230RPX	LED	1
IND4~7	LN363GPPKU	LED	4

Ref. No.	Part No.	Part Name & Description	Pcs
COILS & TRANSFORMERS			
L1	PQLQZMR27M	COIL	1
L2	PQLQZM1R5K	COIL	1
L101	PQLQZM100K	COIL	1
T1	EIL7EM003P	COIL	1
T2	EIL7EL011P	COIL	1
T3	EIL7EL012P	COIL	1
T4	EIL7EL013P	COIL	1
T5	PQLA7A9	COIL	1
T6	PQLA7A11	COIL	1
T7	PQLI2B201	I.F. TRANSFORMER	1
T8	PQLA7A22	COIL	1
T9	PQLA7A7	COIL	1
SWITCHES			
S1	EVQQJ05Q	SWITCH, TALK	1
S2~7	EVQ22405K	SWITCH, PAGE/INTERCOM etc.	6
S103	POSH1A44Z	SWITCH, CHANNEL	1
S104	ESD11H120	SWITCH, POWER/RINGER	1
S105	ESD11H120	SWITCH, VOLUME SELECTOR	1
OTHERS			
CF1	RVFSFE107MSR	CERAMIC FILTER	1
CF2	PQVFCFW455E	CERAMIC FILTER	1
TC1	ECRLA030E53	TRIMMER CAPACITOR	1
VR1,2	EVNDXAA03B35	VARIABLE RESISTOR	2
X1	PQVCJ10240C5	CRYSTAL OSCILLATOR	1
X101	PQVCL3276N9Z	CRYSTAL OSCILLATOR	1
X102	PQVCJ3992N9Z	CRYSTAL OSCILLATOR	1
CABINET PARTS			
K1	PQKM10036Z1	CABINET BODY	1
K2	PQYF10010Z1	CABINET PLATE	1
K3	PQSX10002Z	BUTTON	1
K4	PQBC10043Z1	BUTTON	1
K5	PQBD10006Z1	KNOB	1
K6	PQBD10007Z1	KNOB	1
K7	PQBD10008Z1	KNOB	1
K8	PQBX10026Z1	BUTTON	1
K9	PQGP10007Z	PANEL	1
K10	PQSA813Y	FLEXIBLE ANTENNA	1
K11	PQKK10005Z1	LID	1
K12	PQGD10030Z	TEL CARD	1
K13	PQHR9736Z	TRANSPARENT PLATE	1
K14	PQBC10021Z1	BUTTON	1
K15	XTW26+12F	SCREW	1
ELECTRICAL PARTS			
E1	PQAX3P07Z	SPEAKER	1
E2	PQJM124Z	MICROPHONE	1
E3	KX-A36A	RECHARGEABLE BATTERY	1
E4	PQJP2D59Z	CONNECTOR (CN1)	1
E5	PQJT10008Z	METAL PARTS	3
E6	PQEFBQM111G1	BUZZER	1
E7	XTW26+10E	SCREW	2
E8	XTW26+8F	SCREW	2
E9	XTW3+W8P	SCREW	2
E10	PQHR10121Z	SPACER	2
E11	PQWPT3855HM	P.C. BOARD ASSY (RTL)	1

Ref. No.	Part No.	Part Name & Description	Pcs
RESISTORS			
R1	PQ4R10XJ331	330	220K
R2	ERDS2TJ470	47	100K
R3	PQ4R10XJ562	5.6K	5.6K
R4	PQ4R10XJ103	10K	100K
R5	PQ4R10XJ102	1K	22K
R6	PQ4R10XJ152	1.5K	22K
R7	PQ4R10XJ333	33K	560
R8	PQ4R10XJ223	22K	47
R9	PQ4R10XJ102	1K	150K
R10	PQ4R10XJ104	100K	47
R11	PQ4R10XJ473	47K	39K
R12	PQ4R10XJ474	470K	47
R13	PQ4R10XJ334	330K	22
R14	PQ4R10XJ222	2.2K	
R15	PQ4R10XJ823	82K	68K
R16	PQ4R10XJ104	100K	330
R17	PQ4R10XJ183	18K	1.5K
R18	PQ4R10XJ564	560K	100
R19	PQ4R10XJ103	10K	47K
R20	PQ4R10XJ124	120K	100K
R21	PQ4R10XJ184	180K	6.8K
R22	ERJ3GEYJ153	15K	100K
R23	PQ4R10XJ273	27K	330
R24	PQ4R10XJ561	560	22
R25	PQ4R10XJ103	10K	4.7K
R26	PQ4R10XJ103	10K	10K
R27	PQ4R10XJ104	100K	3.3K
R28	PQ4R10XJ104	100K	100K
R29	PQ4R10XJ104	100K	100K
R30	PQ4R10XJ104	100K	100K
R48	PQ4R10XJ152	1.5K	100K
R49	PQ4R10XJ333	33K	100K
R50	PQ4R10XJ223	22K	220
R51	PQ4R10XJ104	100K	220
R52	PQ4R10XJ224	220K	
R53	PQ4R10XJ104	100K	
R54	PQ4R10XJ562	5.6K	
R55	PQ4R10XJ104	100K	
R56	PQ4R10XJ223	22K	
R57	PQ4R10XJ223	22K	
R58	PQ4R10XJ561	560	
R59	ERDS2TJ470	47	
R60	PQ4R10XJ154	150K	
R61	PQ4R10XJ470	47	
R62	PQ4R10XJ393	39K	
R63	PQ4R10XJ470	47	
R65	PQ4R10XJ220	22	
R101	PQ4R18XJ683	68K	
R102	PQ4R10XJ331	330	
R103	PQ4R10XJ152	1.5K	
R104	PQ4R10XJ101	100	
R105	PQ4R10XJ473	47K	
R110	PQ4R10XJ104	100K	
R111	PQ4R10XJ682	6.8K	
R112	PQ4R10XJ104	100K	
R113	PQ4R18XJ331	330	
R114	PQ4R10XJ220	22	
R115	PQ4R10XJ472	4.7K	
R116	PQ4R10XJ103	10K	
R117	PQ4R10XJ332	3.3K	
R118	ERDS2TJ104	100K	
R119	ERDS2TJ104	100K	
R120	PQ4R10XJ104	100K	
R121	PQ4R10XJ104	100K	
R122	PQ4R18XJ104	100K	
R124	PQ4R10XJ221	220	
R125	PQ4R10XJ221	220	
CAPACITORS			
C1	PQCUV1H103KB	0.01	0.1
C2	PQCUV1H103KB	0.01	0.0012
C3	PQCUV1H100DC	10P	4.7
C4	PQCUV1H060DC	6P	10
C5	PQCUV1H180JC	18P	1
C6	PQCUV1H103KB	0.01	0.1
C7	PQCUV1H223KB	0.022	0.01
C8	PQCUV1E104MD	0.1	0.01
C9	PQCUV1H472KB	0.0047	12P
C10	ECEA0GKS470	47	39P
C11	PQCUV1H103KB	0.01	4P
C12	ECEA1CKS100	10	47
C13	PQCUV1E473MD	0.047	0.01
C14	PQCUV1H103KB	0.01	0.1
C16	PQCUV1E104MD	0.1	0.022
C17	PQCUV1H103KB	0.01	0.01
C18	ECEA0GKS470	47	3P
C19	PQCUV1H122KB	0.001	0.001
C20	PQCUV1E104MD	0.1	18P
C21	ECEA1VKS4R7	4.7	15P
C22	ECEA1CKS100	10	33P
C23	ECEA1CKS100	10	68P
C24	PQCUV1H102J	0.001	47P
C25	PQCUV1E104MD	0.1	
C26	PQCUV1H122KB	0.0012	
C27	ECEA1VKS4R7	4.7	
C28	ECEA1CKS100	10	
C29	ECEA1HKS010	1	
C30	PQCUV1E104MD	0.1	
C32	PQCUV1H103KB	0.01	
C33	PQCUV1H103KB	0.01	
C34	PQCUV1H120JC	12P	
C35	PQCUV1H390JC	39P	
C36	ECUV1H040CCV	4P	
C49	ECEA0GKS470	47	
C50	PQCUV1H103KB	0.01	
C51	PQCUV1E104MD	0.1	
C52	PQCUV1H223KB	0.022	
C53	PQCUV1H103KB	0.01	
C54	PQCUV1H030CC	3P	
C55	PQCUV1H102J	0.001	
C56	PQCUV1H180JC	18P	
C57	PQCUV1H150JC	15P	
C58	PQCUV1H330JC	33P	
C59	PQCUV1H680JC	68P	
C60	PQCUV1H470JC	47P	

Ref. No.	Part No.	Value	Ref. No.	Part No.	Value
C63	PQCBC1H180JC	18P	C81	PQCUV1H103KB	0.01
C64	PQCUV1H100DC	10P	C101	PQCUV1E104MD	0.1
C65	PQCUV1H103KB	0.01	C102	PQCUV1H180JC	18P
C66	PQCUV1H220JC	22P	C103	PQCUV1H180JC	18P
C67	PQCUV1H103KB	0.01	C104	PQCUV1H100DC	10P
C68	PQCUV1H103KB	0.01	C105	PQCUV1H100DC	10P
C69	PQCUV1H680JC	68P	C106	PQCUV1E104MD	0.1
C70	PQCUV1H101JC	100P	C107	ECEA1AKS221	220
C76	ECEA1CKS100	10	C108	PQCUV1H103KB	0.01
C77	PQCUV1H103KB	0.01	C109	PQCUV1H103KB	0.01
C78	PQCUV1H103KB	0.01	C110	PQCUV1H103KB	0.01
C79	PQCUV1E104MD	0.1	C111	PQCUV1H103KB	0.01
C80	PQCUV1H181JC	180P			
KX-T3855					
Ref. No.	Part No.	Part Name & Description			Pcs
ACCESSORIES					
A1	KX-A10	AC ADAPTOR			1
A2	PQJA59V	TEL CORD (LONG)			1
A3	PQJA59X	TEL CORD (SHORT)			1
A4	PQQX10124Z	INSTRUCTION BOOK			1
A5	PQQW10135Z	QUICK REFERENCE CARD			1
PACKING MATERIALS					
P1	XZB20X35A01	PROTECTION COVER			1
P2	XZB13X30A02	PROTECTION COVER			1
P3	PQPN10042Z	ACCESSORY BOX			1
P4	PQPN10092Z	CUSHION			1
P5	PQPK10140Z	GIFT BOX			1